

IN THE SPECIFICATION

Please amend the paragraph at page 3, lines 20-23, of the specification as follows:

- (ii) determining two points that are the intersections between the MSP and the volume of the brain shown in the image under examination, denoting the two points as A ($x_A, y_A, 0$) and B ($x_B, y_B, 0$), both of the two points being on the MSP;

Please amend the paragraph at page 4, lines 9-20, of the specification as follows:

- (v) changing the original coordinate system OXYZ to the reformatted co- ordinate system O' X' Y'Z', the unit vectors of the co-ordinates O'X', O'Y' and O'Z' being calculated in the following manner:

$$O' X' = (a, b, c) = (n_{x1}, n_{y1}, n_{z1})$$

$$O'Y' = ((x_A[[A]] - x_B[[B]]) / |A-B|, (y_A[[A]] - y_B[[B]]) / |A-B|, 0) = (n_{x2}, n_{y2}, n_{z2})$$

$$O'Z' = O'X' \times O'Y' = (n_{x3}, n_{y3}, n_{z3})$$

where $|A-B|$ is the Euclidean distance between points A and B, the transformation between OXYZ and O'X'Y'Z' being defined as follows:

$$X' = n_{x1} X + n_{y1} Y + n_{z1} Z$$

$$Y' = n_{x2} X + n_{y2} Y + n_{z2} Z$$

$$Z' = n_{x3} X + n_{y3} Y + n_{z3} Z$$

$$O' = 0.$$

Please amend the paragraph at page 12, lines 12-17, of the specification as follows:

- b) If the original coordinate system OXYZ is changed to O'X'Y'Z', the unit vectors of O'X', O'Y' and O'Z' are calculated in the following manner:

$$O' X' = (a, b, c) = (n_{x1}, n_{y1}, n_{z1})$$

$$O'Y' = ((x_A[[A]] - x_B[[B]]) / |A-B|, (y_A[[A]] - y_B[[B]]) / |A-B|, 0) = (n_{x2}, n_{y2}, n_{z2})$$

$$O'Z' = O'X'xO'Y' = (n_{x3}, n_{y3}, n_{z3})$$

where $|A-B|$ is the Euclidean distance between points A and B.